REMARKS

In the non-final Office Action, the Examiner rejected claims 13-24 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement; rejected claims 1, 3, and 4 under 35 U.S.C. § 103(a) as unpatentable over Duault et al. (U.S. Patent No. 6,108,336) in view of Haas (WO 99/45739); rejected claims 2, 7, 13, 14, and 20 under 35 U.S.C. § 103(a) as unpatentable over Duault et al. in view of Haas and Grossglauser et al. (U.S. Patent No. 5,604,731); and rejected claims 8 and 15 under 35 U.S.C. § 103(a) as unpatentable over Duault et al. in view of Haas, Grossglauser et al., and Applicant's admitted prior art (hereinafter "AAPA"). The Examiner objected to claims 5, 6, 9-12, 16-19, and 21-24 as dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the features of the base claim and any intervening claims.

By this Amendment, Applicant amends claims 13 and 20 to improve form and adds new claims 25 and 26. Applicant appreciates the Examiner's identification of allowable subject matter, but respectfully traverses the Examiner's rejections under 35 U.S.C. §§ 112 and 103 with regard to the currently pending claims. Claims 1-26 are pending.

In paragraph 3 of the Office Action, the Examiner rejected claims 13-24 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner alleged that the phrase "at least one of a mean rate or a peak cell rate" recited in claims 13 and 20 is not disclosed in the specification (Office Action, page 2). Applicant has amended claims 13 and 20 to recite "a mean rate and a peak cell rate." Support for this feature is found, for example, at page 7 of Applicant's specification.

Accordingly, Applicant respectfully requests that the rejection of claims 13-24 under 35 U.S.C. § 112, first paragraph, be reconsidered and withdrawn.

In paragraph 5 of the Office Action, the Examiner rejected claims 1, 3, and 4 under 35 U.S.C. § 103(a) as allegedly unpatentable over Duault et al. in view of Haas. Applicant respectfully traverses the rejection.

Independent claim 1 is directed to a statistical multiplex transmission system for use in a network which includes a first local area asynchronous transfer mode (ATM) network including a plurality of first terminal devices, a second local area ATM network including a plurality of second terminal devices, and a public ATM network connected to the first and second ATM networks. The system comprises a first multiplex gateway device for connecting the first local area ATM network and the public ATM network and a second multiplex gateway device for connecting the second local area ATM network and the public ATM network. The first and second multiplex gateway devices are configured to receive ATM transmission signals from the first and second local area ATM networks, respectively, perform a statistical multiplexing process to determine statistical information based on a mean rate and a peak cell rate associated with the ATM transmission signals and generate transmission statistical multiplex signals based on the statistical information, and transmit the transmission statistical multiplex signals to the public ATM network.

Neither Duault et al. nor Haas, whether taken alone or in any reasonable combination, discloses or suggests the combination of features recited in claim 1. For example, neither Duault et al. nor Haas discloses or suggests first and second multiplex gateway devices that are configured to, among other things, perform a statistical multiplexing process to determine

statistical information based on a mean rate and a peak cell rate associated with the ATM transmission signals and generate transmission statistical multiplex signals based on the statistical information.

The Examiner admitted that Duault et al. does not disclose or suggest these features (Office Action, pages 3-4). The Examiner alleged, however, that Haas discloses determining statistic information based on a mean rate (SCR) and peak cell rate (PCR) in order to perform statistical multiplexing of signals onto a transmission path (Office Action, page 4). Applicant respectfully disagrees.

Haas discloses a method for controlling acceptance or refusal of a new connection on an ATM communications device (Abstract). Haas discloses using the sum of the peak cell rates (PCRs) and the sum of the sustainable average cell rates (SCRs) corresponding to the existing connections and the new connection to determine whether to accept the new connection (Abstract). Assuming, for the sake of argument, that the SCR can be equated to a mean cell rate (a point that Applicant does not concede), nowhere does Haas disclose or suggest generating transmission statistical multiplex signals based on statistical information that is determined based on the PCR and SCR, as would be required by claim 1. Instead, Haas discloses using PCR and SCR information to determine whether to accept a new connection.

Therefore, even if Haas was combinable with Duault et al., the combined system would use PCR and SCR information to determine whether to accept a new connection within the Duault et al. system. The combined system would not generate transmission statistical multiplex signals based on statistical information that is determined based on a mean rate and a peak cell rate associated with received ATM transmission signals, as required by claim 1.

For at least these reasons, Applicant submits that claim 1 is patentable over Duault et al. and Haas, whether taken alone or in any reasonable combination. Claims 3 and 4 depend from claim 1 and are, therefore, patentable over Duault et al. and Haas for at least the reasons given with regard to claim 1.

In paragraph 6 of the Office Action, the Examiner rejected claims 2, 7, 13, 14, and 20 under 35 U.S.C. § 103(a) as allegedly unpatentable over Duault et al. in view of Haas and Grossglauser et al. Applicant respectfully traverses the rejection.

Claims 2 and 7 depend from claim 1. The disclosure of Grossglauser et al. does not cure the deficiencies in the disclosures of Duault et al. and Haas identified above with regard to claim 1. Therefore, claims 2 and 7 are patentable over Duault et al., Haas, and Grossglauser et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Independent claims 13 and 20 recite features similar to features described above with regard to claim 1. The disclosure of Grossglauser et al. does not cure the deficiencies in the disclosures of Duault et al. and Haas, as identified above with regard to claim 1. Therefore, claims 13 and 20 are patentable over Duault et al., Haas, and Grossglauser et al., whether taken alone or in any reasonable combination, for at least reasons similar to reasons given with regard to claim 1. Claim 14 depends from claim 13 and is, therefore, patentable over Duault et al., Haas, and Grossglauser et al. for at least the reasons given with regard to claim 13.

In paragraph 7 of the Office Action, the Examiner rejected claims 8 and 15 under 35 U.S.C. § 103(a) as allegedly unpatentable over Duault et al. in view of Haas, Grossglauser et al., and AAPA. Applicant respectfully traverses the rejection.

Claim 8 depends from claim 1. The AAPA disclosure does not cure the deficiencies in the disclosures of Duault et al. and Haas identified above with regard to claim 1. Therefore, claim 8 is patentable over Duault et al., Haas, and AAPA, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Claim 15 depends from claim 13. The AAPA disclosure does not cure the deficiencies in the disclosures of Duault et al., Haas, and Grossglauser et al. identified above with regard to claim 13. Therefore, claim 15 is patentable over Duault et al., Haas, Grossglauser et al., and AAPA, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 13.

New independent claim 25 is directed to a statistical multiplexing device, comprising a plurality of ATM transmission line units, a control unit, and an ATM multiplexing/demultiplexing unit. The plurality of ATM transmission line units are configured to receive ATM transmission signals and perform a statistical multiplexing process to determine statistical information based on a mean rate and a peak cell rate associated with the ATM transmission signals. The control unit is configured to determine a piece-wise constant bit rate based on the statistical information. The ATM multiplexing/demultiplexing unit is configured to generate statistical multiplex signals based on the piece-wise constant bit rate and transmit the statistical multiplex signals to a public ATM network.

The references of record do not disclose or suggest the combination of features recited in new claim 25. For example, none of the references discloses or suggests a control unit that is configured to determine a piece-wise constant bit rate based on statistical information that is determined based on a mean rate and a peak cell rate associated with received ATM transmission

signals, or an ATM multiplexing/demultiplexing unit that is configured to generate statistical multiplex signals based on the piece-wise constant bit rate and transmit the statistical multiplex signals to a public ATM network.

For at least these reasons, Applicant submits that new claim 25 is patentable over the references of record. New independent claim 26 recites some features similar to features recited in new claim 25. Claim 26 is, therefore, patentable over the references of record for at least reasons similar to reasons given with regard to claim 25.

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If the Examiner does not believe that all pending claims are now in condition for allowance, the Examiner is urged to contact the undersigned to expedite prosecution of this application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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